



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/527,974

03/17/2000

Chris Weyand

10992045-1

4502

22879

7590

10/01/2004

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

EVANS, ARTHUR G

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/527,974

Applicant(s)

WEYAND ET AL.

Examiner

Arthur G. Evans

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04-26-04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9-12, 17-29 is/are rejected.
- 7) ☒ Claim(s) 5-8, 13-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

ARTHUR G. EVANS
SENIOR PRIMARY EXAMINER

Art Unit: 2622

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-4, 10-12, 18-20, 22-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Yang. Note “firmware associated with the printing system” (printer firmware, see line 1 of the abstract), “communications device adapted and constructed to facilitate communication between the printing system and a remote source of information” (modem 102 and network 101 connects printer and remote server, see lines 52-64 of column 2), “automatic remote firmware update mechanism adapted to selectively and automatically retrieve firmware upgrade information from the remote source of information via the communications device” (downloader automatically checks whether an specific identification code is present, i.e. selectively, then downloads and updates firmware for the printing

Art Unit: 2622

system, see lines 36-52 of column 2), "selectively and automatically install the firmware upgrade information into the firmware of the printing system" (204 of figure 2 determines if end block is reached and then 214 writing value into position to complete installation) and "firmware upgrade information comprises information configured to effect at least one operation of a printer of the printing system with respect to the formation of a hard image upon media using the printer" (in a printer, firmware controls the printing action, see lines 36-40 of column 1) of Yang as claimed in claim 1 of the application.

Note "automatic remote firmware update mechanism comprises a part of firmware installed in the imaging printing system" (firmware contains download command, see lines 64-1 of columns 2-3) of Yang as claimed in claim 2 of the application.

Note "communications device is selected from a group consisting of a modem and a network interface card" (see lines 59-62 of column 1 and lines 57-58 of column 2) of Yang as claimed in claim 3 of the application.

Note, "communication device further comprises means for connecting to, and accessing information from, a web site" (updating via internet is disclosed, see lines 51-56 of column 1) of Yang as, claimed in claim 4 of the application.

Art Unit: 2622

Note “means for notifying a system user when firmware is to be upgraded” (message of download OK is shown on the computer display before the printer is rebooted and the updated are actually enabled, i.e. upgrade completed, see lines 9-12 of column 4) of Yang as claimed in claim 10 of the application.

Note “selectively and automatically retrieving firmware upgrade information from the remote source of information via the communications device” (downloader automatically checks whether an specific identification code is present, i.e. selectively, then downloads and updates firmware in the printing system, see lines 36-52 of column 2) and “selectively installing the firmware upgrade information into the firmware of a printer of the printing system” (204 of figure 2 determines if end block is reached and then 214 writing value into position to complete installation) of Yang as claimed in claim 11 of the application.

Note, “retrieving firmware upgrade information comprises retrieving firmware upgrade information form a web site” (updating via internet is disclosed, see lines 51-56 of column 1) of Yang as, claimed in claim 12 of the application.

Note “notifying a system user when firmware has been upgraded” (message of download OK is shown on the computer display before the printer is rebooted and the updated are actually enabled, i.e. upgrade completed, see lines 9-12 of column 4) of Yang as claimed in claim 18 of the application.

Art Unit: 2622

Note "firmware installed in the printer" (printer firmware is updated, see abstract), "communication device adapted and constructed to facilitate communication between the printer and a remote device containing firmware upgrade information" (modem 102 and network 101 connects printer and remote server, see lines 52-64 of column 2), "automatic remote firmware update mechanism adapted to selectively and automatically retrieve firmware upgrade information from the remote device via the communications device" (downloader automatically checks whether an specific identification code is present, i.e. selectively, then downloads and updates firmware for the printing system, see lines 36-52 of column 2), and "to selectively and automatically install the firmware upgrade information into the firmware of the printer" (204 of figure 2 determines if end block is reached and then 214 writing value into position to complete installation) of Yang as claimed in claim 19 of the application.

Note ""automatic remote firmware update mechanism adapted to selectively and automatically retrieve firmware upgrade information from the remote device" (downloader automatically checks whether an specific identification code is present, i.e. selectively, then downloads and updates firmware for the printing system, see lines 36-52 of column 2) of Yang as claimed in claim 20 of the application.

Note "printer configured to form hard image upon sheets of media" (Yang teaches print engine (see lines 24-29 of column 1) in typical printer. Typical printer prints hard copy on media, i.e. paper.), "initial firmware provided at a first moment in time, and wherein the initial firmware is accessed to implement

Art Unit: 2622

operations of the printer with respect to the formation of hard images upon the sheets of media using the printer” (existing firmware operates printer after booting, [see lines 47-50 of column 3] printer performs general functions such as printing a document [see lines 19-21 of column 3]), “communications device adapted to communicated with a source located externally of the printer” (modem 102 and network 101 connects printer and remote server, see lines 52-64 of column 2) and “circuitry coupled with the communications device and configured to automatically access additional firmware form the source a second moment in time after the first moment in time using the communications device and to render the additional firmware accessible within the printer to implement operations of the printer with respect to the formation of hard images upon the sheets of media using the printer” (downloader automatically checks after printing [see lines 47-50 of column 3, see lines 19-21 of column 3], i.e. second moment in time, whether an specific identification code is present, then downloads and updates firmware for the printing system, see lines 36-52 of column 2) of Yang as claimed in claim 22 of the application.

Note, “additional firmware updates the initial firmware” (newer version updates the existing version, see lines 57-66 of column 1) of Yang as, claimed in claim 23 of the application.

Note, “additional firmware replaces at least a portion of the initial firmware” (newer version updates part, if not all of existing version, see lines 57-66 of column 1) of Yang as, claimed in claim 24 of the application.

Art Unit: 2622

Note, "additional firmware comprises firmware in addition to the initial firmware" (block of new-version of firmware is input, only after checking for ed block is new written over existing version, see lines 13-18 of column 6) of Yang as, claimed in claim 25 of the application.

Note, "second moment in time is after deployment of the printer by a user" (downloader automatically checks after printing [see lines 47-50 of column 3, see lines 19-21 of column 3], i.e. second moment in time, whether an specific identification code is present) of Yang as, claimed in claim 26 of the application.

Note, "circuitry is configured to render the additional firmware accessible without user input" (downloader automatically checks whether an specific identification code is present, i.e. selectively, then downloads and updates firmware for the printing system, see lines 36-52 of column 2) of Yang as, claimed in claim 27 of the application.

Note, "circuitry comprises an automatic remote firmware update mechanism" (downloader automatically checks whether an specific identification code is present, i.e. selectively, then downloads and updates firmware for the printing system, see lines 36-52 of column 2) of Yang as, claimed in claim 28 of the application.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

Art Unit: 2622

said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 17, 21 and 29 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yang.

Regarding claims 9 and 17, Yang installs a newer version of firmware upgrade information but does not specifically state that the new version is compared to old version. However if it is known that the newer version is newer of the two versions, the versions must inherently be compared to each other to determine that one is newer. Therefore the claim limitation is anticipated.

In the alternative regarding claims 9 and 17, comparing versions of firmware to determine if a newer version has been found is well known in the same field of endeavor. It would have been obvious to one of ordinary skill in the art to compare the versions of the firmware in the system of Yang to obtain the advantage of determining if a newer version has actually been found.

Regarding claims 21 and 29, Yang teaches print engine (see lines 24-29 of column 1) in typical printer. Typical printer prints hard copy on media (paper). Housing configured to at least partially house the firmware, the print engine and the automatic firmware update mechanism is not specified. However, the printer of Yang would inherently have a housing (case) in the electronics of the printer would be enclosed in.

In the alternative regarding claims 21 and 29, enclosing printer components in a housing to protect components is very well known in the same field

Art Unit: 2622

of endeavor. It would have been obvious to one of ordinary skill in the art to enclose printer components in housing to protect the components.

Claims 5-8 and 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


The following is a statement of reasons for the indication of allowable subject matter: Yang teaches only updating when power on or after some general function (see lines 2-5 of column 2) and does not teach or render obvious "incrementally increasing the update trigger parameter in response to a sensed condition" and "retrieve firmware upgrade information when the update trigger parameter reaches a predetermined update value" as claimed in claims 5-8 and 13-16.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arthur G. Evans whose telephone number is 703-305-9653. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 703-305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 29, 2004



ARTHUR G. EVANS
SENIOR PRIMARY EXAMINER